



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 2
CITY VIEW PLAZA II BUILDING, 7TH FLOOR
ROUTE 165 GUAYNABO, PUERTO RICO 00968

NOV 15 2019

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Article Number: 7015 0920 0000 8689 4148

Mrs. Irma López
Executive Director
Environmental Compliance, Health, and Occupational Safety
Puerto Rico Aqueduct and Sewer Authority
P.O. Box 7066
San Juan, Puerto Rico 00916-7066

**Re: Compliance Evaluation Inspection
Guánica Wastewater Treatment Plant
NPDES Permit Number PR0020486**

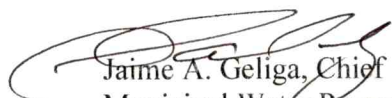
Dear Mrs. López:

On October 31, 2019, the United States Environmental Protection Agency (EPA) conducted a Compliance Evaluation Inspection (CEI) at the above referenced Puerto Rico Aqueduct and Sewer Authority's (PRASA) Wastewater Treatment Plant (WWTP) located in Guánica, Puerto Rico. The CEI was conducted pursuant to the authority contained in Section 308 of the Clean Water Act, 33 U.S.C. § 1251 et seq., 40 CFR § 122.41(a)(2), & 1, 2, 3, and in accordance with Agency wide acceptable guidance and procedures. PRASA was represented by Amalio Quirós, Plant Operator; Edgardo Jorge, Plant Operator; Rosalía Torres, Environmental Compliance Specialist; and Denny Richardson, Plant Supervisor.

Enclosed you will find the inspection report. The CEI report indicates the noncompliance items or deficiencies which should be corrected to ensure compliance with the Clean Water Act and the National Pollutant Discharge Elimination System ("NPDES") Permit. There are also certain areas of concern which are items that could be improved for better operation of the facility. Within ninety (90) calendar days of receipt of this letter, please respond with the actions that PRASA has taken or will take to address the deficiencies included in the attached Water Compliance Inspection Report.

Should you have any questions feel free to contact Miguel A. Batista, Environmental Engineer, at (787) 977-5823.

Sincerely,


Jaime A. Geliga, Chief
Municipal Water Program Branch
Caribbean Environmental Protection Division

Enclosure

cc. Annette Feliberty, EQB (w/Enclosures)
Pedro Pérez, PRASA

NPDES Inspection Report

COMPLIANCE EVALUATION INSPECTION

Facility Name: Guanica WWTP
NPDES Permit Number: PR0020486
Permit Status: Active (02/01/2008 – 01/31/2023)
PRASA representative: Amalio Quirós, Plant Operator
Edgardo Jorge, Plant Operator
Rosalía Torres, Environmental Compliance Specialist
Denny Richardson, Plant Supervisor
EPA Inspector: Miguel A. Batista, Environmental Engineer

I. BACKGROUND

A Compliance Evaluation Inspection (CEI) was conducted on October 31, 2019 at the Guánica WWTP. The CEI consisted of an opening interview to discuss the purpose of the inspection and to request information about the facility, a site tour to overview operational and maintenance conditions, a document review to assess records compliance, sampling at the Discharge Point 001 (grab sample taken for a few physical/chemical parameters) to determine permit compliance, and a closing interview to discuss preliminary findings.

II. FACILITY DESCRIPTION AND OPERATOR'S LICENCE STATUS

The Guánica WWTP is a secondary treatment plant. The facility consists of two treatment modules. One module is a 0.5 MGD activated sludge conventional package plant (Old Plant), and the second module is a 1.25 MGD Biological Nutrient Removal (BNR) treatment plant (New Plant). At the time of the CEI, the new plant was in service. The old plant was not in service.

At the time of the inspection, Mr. Amalio Quirós and Mr. Edgardo Jorge were acting as Plant Operators for the Guánica WWTP. Mr. Quirós has obtained the certification as a WWTP Operator Level IV, license # 2099, which expires on April 21, 2020. Mr. Jorge has obtained the certification # 2932 as a WWTP Level IV. Such certification expires on May 22, 2020.

III. COMPLIANCE STATUS WITH CONSENT DECREE (CD)

As part of the Preventive Maintenance Program (PMP) minimum requirements required by the CD (CD 3:15-cv-02283-JAG, signed on September 15, 2015), the Santa Isabel WWTP is implementing the program (Appendix U) with some deficiencies.

IV. INSPECTION FINDINGS

A. Observations:

1. One out of two bar screen units was in service.
2. The comminutor was out of service.
3. Degritters were out of service. The degritter's pipeline was corroded.
4. There was no preliminary treatment.
4. The sludge bel filter press was out of service.
5. The Alternate Power Unit (APU) was out of service, its transfer switch was damaged.
6. Housekeeping (landscape) practices must be improved.
7. Biological Nutrient Removal (BNR).
 - i) The bar screen was full of solids.
 - ii) Excessive bubbling was observed at the BNR.
 - iii) Some mixers at the BNR unit were out of service.
 - iv) Old sludge and grease were observed at the BNR unit.
 - v) An air leak was detected at the BNR.
8. Corrosion-related issues throughout the facility were observed as in previous inspections.
9. Clarifier # 1 was out of operation. It was empty. As part of repair jobs, an epoxy treatment was ongoing.
10. Clarifier # 2 was in operation. The clarifier's arm was stopped. According to PRASA, the clarifier's arm stops daily. The clarifier's arm had no rubber. The clarifier's inner center had grease and solids. *Nocardia* algae growth was observed in clarifier # 2. Short circuiting was observed at the "V-type" effluent weirs. Corrosion was observed at clarifier # 2. Clarifier appeared to be unleveled, some joints at the "V-type" weirs were also broken. Solids and sludge were observed at the clarifier's surface.
11. There was one out of three chlorine contact chamber in service. It had grease and sludge at its surface.

B. Additional Findings:

1. There were no internet services available at the facility. If the plant operator needs to create a notification for some unit/equipment which is in malfunction or out of service, he needs to call the supervisor by phone to perform it.
2. The computer's keyboard was not operating as intended.

C. Documents Review:

1. The NPDES Permit was available, it expires on January 31, 2023.
2. Last documentation available for trainings on HAZWOPER, OSHA, and Chlorine Management/Handling was dated for years 2016 and 2017.
3. The Chain of Custody documentation and the Operator's Log Book were randomly reviewed for 02/20/2019, 04/10/2019, 06/27/2019 and 10/30/2019. Documents appeared to be updated.
4. Preventive maintenance activities and operator's log book records were randomly reviewed for 02/05/2019, 05/08/2019 and 10/08/2019. Documentation appeared to be updated.

5. The Laboratory Equipment Calibration Book was reviewed for year 2019. Documentation appeared to be updated.
6. The plant's discharge exceeded the effluent limitation for some parameters from October/2018 until September/2019 as follows:

PARAMETER	DATE
No exceedances.	October/2018
No exceedances.	November/2018
No exceedances.	December/2018
No exceedances.	January/2019
No exceedances.	February/2019
BOD 5-Day Weekly Average Concentration. BOD 5-Day Percent Removal.	March/2019
No exceedances.	April/2019
Turbidity.	May/2019
Copper.	June/2019
No exceedances.	July/2019
Enterococci.	August/2019
Cyanide Free, Enterococci.	September/2019

- D. Equipment unit identified in poor operational conditions or not in service at the time of the EPA's CEI (October 31, 2019) are summarized in the following table:**

Equipment Unit (SAP #)	Date Reported Out of service	Work Order #	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)
1. Motor-Blower # 3 (original plant) (1135491)	03/04/2019	10565960	Out of service.	Yes.
2. NPW Pumps Panel (1138553)	10/29/2019	10606426	Malfunction.	No.

Equipment Unit (SAP #)	Date Reported Out of service	Work Order #	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)
3. Pump/Motor Degritter # 1 (208765)	12/18/2017	10330755	Malfunction.	Yes.
4. Pump/Motor Degritter # 2 (208766)	05/29/2017	10455402	Malfunction.	Yes.
5. Motor Paddle Drive Degritter # 1 (1133663)	09/25/2019	10600572	Malfunction.	No.
6. Motor Paddle Drive Degritter # 2 (1133664)	09/25/2019	10600528	Malfunction.	No.
7. Filter Press (1107285)	05/18/2018	10453012	Oil leak.	Yes.
8. Transfer Switch (1102977)	03/29/2019	10570063	Out of service.	Yes.
9. Mixers Control Panel (213039)	09/19/2019	10599687	Malfunction.	No.
10. Blower EQ # 1 (208948)	06/08/2018	10533776	Squeaky noise.	Yes.
11. Blower EQ # 2 (208949)	06/09/2019	10399438	Leak. Pulleys.	No.
12. Blower BNR # 1 (1104338)	09/12/2017	10584741	Leak. Pulleys.	Yes.
13. Blower BNR # 3 (208946)	05/08/2019	10576721	Squeaky noise.	No.
	04/04/2018	10550559	Air leak.	Yes.
14. Blower BNR # 4 (208947)	04/04/2018	10548057	Air leak.	Yes.
15. MCC BNR Room (213035)	04/04/2019	10571356	Magnetics.	Yes.

Equipment Unit (SAP #)	Date Reported Out of service	Work Order #	Type of Failure	O & M CD Requirements deficiencies* (Yes / No)
16. Control Panel Sludge Recirculation Pumps (213040)	07/08/2018	10580777	Malfunction.	Yes.

*Check when equipment has been out of service or operating with deficiency for more than 6 months.

NOTE:

At the time of the CEI, the following mixers were out of service:

1. Anoxic # 2 (SAP # 1112954) – out of service, crane was hanging on.
2. Anoxic # 3 (SAP # 1133241) – out of service, broken crane's tensor.
3. Anaerobic # 1 (SAP # 208007) – out of operation.

None of the above-mentioned equipment had a notification number. According to PRASA, all of them are included under the notification # 10571356 generated on April 4, 2019 for the MCC BNR Room (SAP # 213035), even when each mixer unit had a different SAP #. The dates in which the above-mentioned mixers became out of service are unknown.

In addition:

1. Anoxic Mixer # 2 was not included in the AAA-48 Form, it must be added.
2. According to PRASA, four spare mixers for the aeration phase were removed from the facility. There were no spare mixers available at the time of the CEI.

V. SAMPLING

The effluent sample was evaluated at the discharge point (Point 001) for the parameters shown below at the time of the inspection:

Effluent Grab Sample Results	
Color	No.
Grease	No.
Oil Sheen	No.
Foam	No.
Floatable Solids	00.0 mL/L
Turbidity	8.0 NTU
Residual Chlorine	< 0.02 mg/L
Temperature	29.6 °C
Dissolved Oxygen	7.4 mg/L
pH	7.46 S.U.

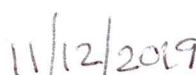
VI. CONCLUSION

The inspection revealed that several process units were out of service or under repair. Please note that **Part 5 of Attachment B: Standard Conditions** of the permit requires the permittee to properly operate and maintain all facilities and systems for collection and treatment (and related appurtenances) which are installed or used to achieve compliance.

PRASA must submit a compliance plan in order to correct the deficiencies notes above on Section IV.



INSPECTOR SIGNATURE



DATE



SUPERVISOR SIGNATURE



DATE